Data Meeting Minutes
3/28/2000
Fresno, CA

Attendees: Pat Lineback (SEKI), Dave Ward (KRN), Julia Koo (RSS), David Drum (TUU), Heidi Hosler (SQF), Robin Marose (CDF), Bob Wirtz (RSS), BBD not in attendance

Handout*:* Project Management Plan

Overview: Project (Stakeholders, Funding, Joint Fire Science Program Grants for research and science, fuels and planning, our unique project of collaboration on info mgmt- emergency mgt, data sharing, joint burn plans, shared resources, goals, four teams, goals and activity plans 4/5-4/6 (milestone meeting to develop project plan, decide funding, to be held at Visalia CDF etc.). Invitation Letter: Who is responsible to put that out? David Drum will send it out and Pat will give him the address list. Project Mgmt. Group (Coord: Albright), this group: Data Development (Coor: Lineback), Data Analysis Group (Coord: Manley). Ex: Hazard Model for S. Sierra (value model, bio model, guidelines) Last group: Fuels Planning (Coord: Gelobter), Goals, Work Process, Joint Burn Plans, Target Areas ex: Case Mtn pointed to due to involving BBD, CDF, NPS, USFS- burn would benefit everyone. One of the things KRN needs is something to sell to air control district…. Get funding back…. Need to bring something to table at next meeting…..All burning for future will probably be in Desert Air District.

Data Development and Utilization: Identify Data Goals and present to Steering Committee 4/5-4/6. Make sure standards and priorities make sense. I.D. Tasks…. Example: if fuels at top of the list…..How can we make that happen…? Develop fuels layer that is seamless?

Cooperative Agreement: Draft has been completed and is being submitted to the NPS solicitor. The agreement will then returned to other 5 agency signatories. Once agencies get the approved document it will go through their internal legal review and this needs to happen soon. Vacancy announcement will go out soon via Gelobter at SQF and will be stationed at SQF in Porterville. Hoping to have this person ready to work in June. Per Gelobter- SQF has to first have money in the bank. Bob asked what is our role with this GIS person…Per Robin their role will be to feed data to this person. Lineback elaborated on the position. End of year workshop to train others on the collaborative project……because prototype…. We need to be careful about documenting things, linking things etc. KRN asked …confirm his GIS person will feed data to the new GIS person…. making sure their goals are being met? Pat explained tasks of this person and the interrelationship with contractor(s). Issues related: Data Clearinghouse- access and agency responsibilities, goals to have up and running by Nov.? Ex: Create roads layer with certain data standards. How important is this particular layer? This is one of the things we need to prioritize.

Project Mgt. Plan:
*Statement of Work or Goals
*GIS Data Layers for Incident Support- Use that handout as a starting point for data prioritization.
*Framework: Sub-Project: Project Mgt. Handout: Major Steps needed to develop a data clearinghouse that will drive spending and contracting. Pat wants this group to build this same kind of plan to the steering group to make part of the overall project plan. This Groups Task = Data Development and Utilization: Concentrate on 3 Statements of Work (Goals). (1) The most important seamless data is developed (what is it). (2) Data is readily accessible and available (Data Clearinghouse), (3) Data Utilization Tools Enhance and Optimize use of Data and Analysis Models (what do we need to focus on as a group).

Discussion of 3 goals to make sure they make sense: Per Robin Goal #1 is reasonable to do in 1 day. Refer to list of layers used for incident support. What's missing on that list is Assets at Risk One of benefits of this coop will be getting a handle on consequences (biological) of pre-fire activities, etc……..Ex: change detection project. S.Sierra-fire is the major agent of change. Fire Managers are the ecosystem managers. Per Pat: Direction from managers is missing-----Anticipate what biological models are needed. Examples of things that can be done (Manley – Hazard Analysis, Resistance to Control applied with same parameters across agencies?), but may have to work with each agencies separate hazard analysis but put together and context is maintained so we know what it means and why its different. Example is FRID (Fire Return

Interval Departure), used as a proxy by SEKI for biological need, veg and fire history layer used to develop fire regime, fire return intervals and reliability values (confidence) for major veg communities. Marose-reasons why this doesn't work in other lands where there's logging and grazing that mimic fire. Probably this group can't try to start agreeing on what is the definition of Risk for example…..But, we can try to anticipate what kinds of data people will need for their models so we can come up with some kind of data standardization. Fuels are very important, fire occurrence is important, so a lot of this data the fire plan can drive per Ward. Per Bob: Defining direction for this group to go to is from the analysis group but their on some layers that are definite like fuel. Who's looking at CDF side of this? KRN ideas: Fuel layer, fire history, fire occurrence that includes size and point of origin, slope/aspect, jurisdiction or DPA, water. Bob (RSS) $8.50/ac, Backum rules, smoke mgmt., GIS based model needs to be part of GIS planning process, to find out where this smoke is going to go or will be shut down. This may come from the fuels planning group. Same fireplan data not applied uniformly between ranger districts but we should come up with an agreed on baseline where the work needs to be done and people can build off from their.

VEGETATION: Establish, capture, and maintain, with standard nomenclature, where info comes from, standards, measurements reliability (minimum mapping size is know), if we combine veg need to know where is 1ac mapping unit Vs 50 ac minimum poly size. Related things derived from vegetation: canopy closure is an example of 1 data layer we need consider part of our data needs list. Do we want to build a veg layer with attributes other than what we have now? What does the veg layer need to have to get to what we need for a fuel layer? This question needs to go to the Analysis group. Per Robin: One thing that needs to be addressed today is address the availability of products that can be ordered such as photos whereon projects can be laid out and FS base layers like streams, etc. Need an extraction method, code writing, software needed to do this so people can extract what area they want and ASCII files are then built for that particular area. Need fuel, canopy closure, aspect, slope, elevation. CDF and KRN driven by property owners and don't see as much need for farsite other than as a sales tool. CDF veg mgmt people don't do much modeling. CDF fuel types are different, landowner objectives are different.

On the table for the 4/5-4/6 meeting: Question about the need for farsite data.
What might be needed for joint burn plan? What's the most manageable, resource effective method?

OWNERSHIP: This is our second most important layer. Robin: Two types of ownership: (1) private v. public- Teal Data Center, DPA data; and (2) Parcel level data. Phase 2 could include county plat data, name and an address. What is it going to take for us to be able to put together a burn plan? Robin thinks this (specific lands ownership data) should be on the table right now even though its phase 2.

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DEMS: Elevation (meters and feet), Slope (% and degrees), Aspect (3 flavors), Hillshade and Contours (2 intervals). Do we want to go the next level up where elevation, for example is reclassed. Raster and Polygon data both. To be used by the Arcview community.

DOQ Imagery order with 1-meter resolution. Color infrared vs. B&W. Compression possibilities. Approximately 600 -¼ quads, potentially to put in the clearinghouse if there was room. Could be provided in different ways: mosaiced and compressed- packaged, put on CDs by GIS tech, put at Clearinghouse. Robin- they are already doing this as part of the Firescope- mosaicing ¼ quads into full quads. They may be able to distribute this as full quads. However, there is value to mosaicing by watershed. Robin- there is a quad retrieval tool- PFE tool (Ventura Tools). Distribution of DOQs: compressed with Mr. Sid. 10:1 compression, 20+ mbs. 20 x 150 quads = 3 gbs = 5 CDs. Data server specifications – capacity approx. 50 gbs. Not practical to download 20 mbs. Look at building and making available at clearinghouse. Per Robin, Firescope can populate the data structure on the server or provide the CDs. Per Robin, we need to get an order in soon…..Bulk rate…..Are we going to have to pay? Per Robin, They are not going forward with a bulk order right now. They can fill out a county possibly….???
Spot Imagery – Coarser resolution. For showing bigger areas but resolution is poor. Robin doesn't see much value in that. One thing to consider is a color composite for the whole 5 mm acre area with general veg and topography.

DRGs: by quad or watershed or subwatershed. 250 mg each. Software that's gotten around this. Dpi 200 for teal quads that were repacked from 400 dpi. The 200s didn't have enough resolution for some projects.

When posting on a server you may want to go back to the higher resolution. Spec something out so new drive space can be added to expand. Go with quads that are clipped and with the highest resolution.

Identification of other "Slam Dunk" Data Layers:
Possibilities:

*Model of SMOKE plume, emissions, etc. NPS-PUFF needs to go to the Analysis Task Group.

***POWERLINES** are important to Kern Co. so Dave will find info on data available at SCE that we can get from them and if so do they want anything for it or anything we can provide in exchange. Question from Bob: Who will have access to the clearinghouse? Robin will find out if they have a database they can distribute. How dynamic is this database?

***FIRE HISTORY** and FIRE OCCURANCE: Point of Origin and statewide firehistory database – polygons. For CDF that falls back into a sales tool and how its going to burn, also ecological aspects. Can fall back to priority and target areas for burn plans, high-risk areas. Cause.

"SPECIAL MANAGEMENT ZONES": Steering Group needs to look at what environmental issues need to be looked at as far as special or sensitive sites…. State game refuges, recreation areas, nature conservancy, knatcatcher habitat etc.

***ROADS AND HYDROGRAPHY**: Per Robin, possibly wait for Tiger 2000 road stuff to come out. Robin uses 1:100000 DLG roads from USGS. Separate out 1:100000 USGS stuff and separate out somehow for choices…Park/FS.

FUELS- How do we maintain and manage a fuel layer once its developed. Need ground verification of crosswalk. Need a mechanism in place to be able to do what we haven't been doing. This group can put emphasis on this with the fuels people. Long term integrity and management of this layer. Robins' group updates theirs every 5 yrs. Can put together a process for how to update fuels at a local level. A recommendation to the Steering Committee: To emphasize to the local fuels people, to get them involved, in the (statewide?) fuel mapping project ayer. Need validation of this layer. Possibly ask Mark to be asked to write a paragraph on where the CDF is currently at and what is the history of the fuels mapping project. Kern Co. is currently behind in this process. Create of synopsis of what is going on and bring it to the forefront, bring the specialists into the initiative and help bring it along to finishing it and carrying it on into the future.

Part of Phase I: About 19-20 layers on the first draft list. Other technical and related issues will come up so need to revisit in the fall, see where additional help is needed, where additional info is needed. This phase is about a 6-month process for the GIS person and possibly a contractor. Phase 2 would be to bring in the GIS person with the technical info on what its taking to create and manage these layers. Next phase to begin around fall. Analysis group needs to come up with priorities and then maybe in fall some new priorities.

Conclusion: Recommendations to the Analysis group. Spreadsheet on our project: data layers, time = 6 months, cost: GS-5/7/9 level. Projected Costs: Max salary for GS-9/1 and add support costs @ 10-15%. Lew will supervise the person and manage the budget. Need to find out what the support costs will be. Pat to ask Aaron. Will spend $7-8,000 for a workstation. Contracting in Phase I is likely so we need to put in a $ figure now on what we are projecting so that we have at least targeted some funds. Obligate $13,000 for a contractor to come up with a process for creating and managing regulation classes for Special Sites layer…possibly a PMR person. Also obligate for Parcel data $3,000 = 1,000/county and DOQs $1,000 total.